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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,041	09/25/2003	Rei-Yian Chen	U 014827-2	6652
140	7590	01/19/2007	EXAMINER	
LADAS & PARRY 26 WEST 61ST STREET NEW YORK, NY 10023			WONG, EDNA	
			ART UNIT	PAPER NUMBER
			1753	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		01/19/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/671,041

Applicant(s)

CHEN ET AL.

Examiner

Edna Wong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 12-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 10/096,543.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date September 25, 2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

***Election/Restrictions***

Applicant's election of Group I, claims 1-11, in the reply filed on December 29, 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

The requirement is still deemed proper and is therefore made FINAL.

Accordingly, claims 12-20 are withdrawn from consideration as being directed to a non-elected invention.

***Specification***

The disclosure is objected to because of the following informalities:

page 1, line 6, the words -- now US Patent No. 6,686,827, -- should be inserted after the year "2002,".

page 9, line 8, the word "a" should be amended to the word -- an --.

page 11, line 15, it is unclear what is meant by the words "its function is to joint with".

page 12, line 18, "layer22" should be amended to -- layer 22 --.

page 12, line 8, "layer12" should be amended to -- layer 12 --.

page 13, line 22, the word "in" should be amended to the word -- is --.

Appropriate correction is required.

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Rejections - 35 USC § 112***

Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**Claim 1**

lines 17-20, recite "laminating a first conductive composite material having PTC characteristics and a metal foil onto said second metal layer in sequence by a thermal laminating process for jointing said first conductive composite material having PTC characteristics and said second metal layer".

It is unclear how the first conductive composite material having PTC

characteristics and a metal foil is laminated onto said second metal layer when a composite electroplated layer including carbon black and metal is formed on said surface of said second metal layer as recited in claim 1, lines 13-15.

### ***Allowable Subject Matter***

The following is a statement of reasons for the indication of allowable subject matter:

Claims 1-11 define over the prior art of record because the prior art does not teach or suggest a method for manufacturing a surface mountable laminated circuit protection device, comprising the steps of providing, performing, laminating, performing and setting as presently claimed, esp., the step of providing a double-sided metal foil clad substrate comprising a first metal layer, a first insulating layer disposed on said first metal layer and a second metal layer disposed on said first insulating layer, wherein said first metal layer and said second metal layer are conducted to each other by a plated through hole which penetrates through said first insulating layer, said first metal layer is further divided into a first unit and a second unit, and said first unit and said second unit are separated and insulated from each other.

The prior art does not contain any language that teaches or suggests the above.

*Zhang et al.* does not provide a double-sided metal foil clad substrate comprising a first metal layer, a first insulating layer disposed on said first metal layer and a second metal layer disposed on said first insulating layer.

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*Chiang et al.* does not provide a double-sided metal foil clad substrate comprising a first metal layer, a first insulating layer disposed on said first metal layer and a second metal layer disposed on said first insulating layer.

Therefore, a person skilled in the art would not have been motivated to adopt the above conditions, and a prima facie case of obviousness cannot be established.

Claims 1-11 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

### ***Citations***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Zhang et al.** (US Patent No. 5,831,510) is cited to teach a circuit protection device.

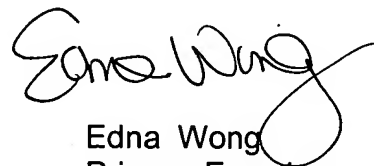
**Chiang et al.** (US Patent Application Publication No. 2002/0050914 A1) is cited to teach a circuit protection device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edna Wong whose telephone number is (571) 272-1349. The examiner can normally be reached on Mon-Fri 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Edna Wong  
Primary Examiner  
Art Unit 1753

EW  
January 17, 2007